# DRAFT – CUPS Software Test Plan

CUPS−STP−1.0

Easy Software Products

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# 1 Scope

## 1.1 Identification

This software test plan provides detailed tests that are used to evaluate the stability of the Common UNIX Printing System ("CUPS") Version 1.0.

## 1.2 System Overview

The Common UNIX Printing System provides a portable printing layer for UNIX® operating systems. It has been developed by Easy Software Products to promote a standard printing solution for all UNIX vendors and users. CUPS provides the System V and Berkeley command−line interfaces.

CUPS uses the Internet Printing Protocol (IETF−IPP) as the basis for managing print jobs and queues. The Line Printer Daemon (LPD, RFC1179), Server Message Block (SMB), and AppSocket protocols are also supported with reduced functionality.

CUPS adds network printer browsing and PostScript Printer Description ("PPD")−based printing options to support real world applications under UNIX.

CUPS also includes a customized version of GNU GhostScript (currently based off GNU GhostScript 4.03) and an image file RIP that can be used to support non−PostScript printers.

## 1.3 Document Overview

This software test plan is organized into the following sections:
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# 2 References

## 2.1 CUPS Documentation

The following CUPS documentation is referenced by this document:
- CUPS–CMP–1.0: CUPS Configuration Management Plan
- CUPS–IDD–1.0: CUPS System Interface Design Description
- CUPS–SAM–1.0.x: CUPS Software Administrators Manual
- CUPS–SDD–1.0: CUPS Software Design Description
- CUPS–SPM–1.0: CUPS Software Programming Manual
- CUPS–SSR–1.0: CUPS Software Security Report
- CUPS–STP–1.0: CUPS Software Test Plan
- CUPS–SUM–1.0.x: CUPS Software Users Manual
- CUPS–SVD–1.0.x: CUPS Software Version Description

## 2.2 Other Documents

The following non–CUPS documents are referenced by this document:
- IEEE 1387.4, System Administration: Printing (draft)
- IPP/1.0: Additional Optional Operations – Set 1
- IPP/1.0: Encoding and Transport
- IPP/1.0: Implementers Guide
- IPP/1.0: Model and Semantics
- RFC 1179, Line Printer Daemon Protocol

# 3 Local Tests

# 4 Remote Tests

# A Glossary

## A.1 Terms

*C*

> A computer language.

*parallel*

> Sending or receiving data more than 1 bit at a time.

*pipe*

> A one−way communications channel between two programs.

*serial*

> Sending or receiving data 1 bit at a time.

*socket*

> A two−way network communications channel.

## A.2 Acronyms

*ASCII*

> American Standard Code for Information Interchange

*CUPS*

> Common UNIX Printing System

*ESC/P*

> EPSON Standard Code for Printers

*FTP*

> File Transfer Protocol

*HP−GL*

> Hewlett−Packard Graphics Language

*HP−PCL*

Hewlett–Packard Printer Control Language

*HP–PJL*

Hewlett–Packard Printer Job Language

*IETF*

Internet Engineering Task Force

*IPP*

Internet Printing Protocol

*ISO*

International Standards Organization

*LPD*

Line Printer Daemon

*MIME*

Multimedia Internet Mail Exchange

*PCL*

Page Control Language

*PPD*

PostScript Printer Description

*SMB*

Server Message Block

*TFTP*

Trivial File Transfer Protocol